



# **COOLPEX Smart Microwave Reaction System**

The COOLPEX Smart Microwave Reaction System is an innovation which integrates an ease of use user-interface with an on board video camera allowing remote viewing of sensors and vessels on an external display.

Optimized industrial slope (23°) design offers operators to be relax to read data in the process.

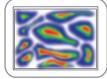
The COOLPEX System, designed in Germany, is ideal for applications in the high pressure range. The operators can choose a preset or customized method via the classic button pad.

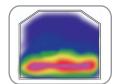


### **Innovation**

#### **Enhanced Microwave Focusing**

- Focused Microwave Energy on the Sample
- Homogenous Microwave Field
- High Microwave Efficiency





Microwave in Plain Cavity

Plain Cavity Microwave in COOLPEX Cavity

#### **Control & Monitoring**

- Remote Observation of Vessels & Sensors is Available through the Built in Video Camera.
- Suiting Human Engineering 23° Board

#### Safety by Design

- Dual Temperature & Pressure control
- Electronic Door Lock
- Cavity 316L Stainless Steel Construction

#### Cavity Space Design

■ Excellent Cavity Design "Small Cavity, Big Space"

Turnplate Design (KJ-180 Vessel)	
Number	10
Material of Inner Vessel	TFM
Material of Sleeve	PEEK
Volume of Inner Vessel	100ml
Max. Working Pressure	40bar
Max. Tolerance Pressure	100bar
Max. Working Temp.	235℃
Max. Tolerance Temp.	<b>260</b> ℃



## **Specifications**

Microwave Resonant Cavity	Custom Designed Microwave Resonant Cavity
Cavity Material	316L Stainless Steel
Volume of Resonant Cavity	34L
Maximum Microwave Power Output	1200W
Microwave Frequency	2450MHz
Microwave Emission Mode	Non-pulse Continuous Microwave Output
Microwave Control Mode	High Frequency Closed-loop Feedback (PID) Control
AC Power Input	220-240V/50Hz, 8A
Turnplate	KJ-180: 10 Vessels Simultaneous Operation
Pressure Measurement & Control System	Pressure Measurement Range: 0-50bar Pressure Measurement Precision: ± 0.1bar Pressure Control Stability: ± 0.5bar
Temperature Measurement & Control System	Temperature Measurement Range: 0-300°C Temperature Measurement Precision: ±1°C Temperature Control Stability: ±1°C
Exhaust System	Anti-corrosion Converting-frequency Centrifugal Blower Max. Air-flow Capacity: 3.5m³/min
Working Environment Temperature	0-40 °C
Relative Humidity	15-80%RH
Exterior Dimension	600mm (H) × 502mm (W) × 562mm (D)
Weight	46Kg

